

AMENDMENTS TO THE CLAIMS

Please cancel claims 2-4, 10-12, 18-20, and 25-27 without prejudice.

Please amend the claims as follows:

1. (Currently amended) A method comprising:
receiving packets of data in a first queue, each of the packets having one of a plurality of priorities, the plurality of priorities including a first priority and a second priority, the first priority being higher than the second priority;
copying a first plurality of packets from the first queue to a second queue, the first queue and the second queue each containing a plurality of sub-queues, each of the plurality of sub-queues representing one of the plurality of priority levels;
scheduling a first ~~subset~~ set of packets from the second queue, wherein the first set of packets includes one or more of packets of the first priority if the second queue contains packets of the first priority and one or more packets of the second priority if the second queue contains packets of the second priority, and wherein the number of packets in the set of packets for each priority are chosen using weighted round robin scheduling based on the priority of each packet;
providing the first set of packets from the second queue to a device driver;
determining whether after the first set of packets has been provided to the device driver the second queue includes a packet with the first priority;

if the second queue includes a packet with a first priority after the first set of packets has been provided to the device driver, scheduling a second ~~subset~~ set of packets from the second queue using the weighted round robin scheduling; and

if the second queue does not include a packet with the first priority after the first set of packets has been provided to the device driver, pausing scheduling of packets from the second queue, and copying a second plurality of packets from the first queue to the second queue.

2-4. (Cancelled)

5. (Currently amended) The method of claim 1, further comprising determining whether the second queue contains one or more packets of the first priority after copying the second plurality of packets from the first queue into the second queue.

6. (Currently amended) The method of claim 5, further comprising commencing a delay period if there is a determination that the second queue does not contain one or more packets of the first priority after copying the second plurality of packets into the second queue.

7. (Currently amended) The method of claim 6, ~~further comprising continuing~~ wherein during the delay period the scheduling of packets from the second queue is to continue after ~~[[a]]~~ the determination that there are no packets of the first priority in the second queue ~~if the delay period is active~~.

8. (Original) The method of claim 6, wherein commencing the delay period comprises starting a timer.
9. (Currently amended) ~~A scheduler~~ An apparatus comprising:
a processor to process data, the data including data packets for scheduling;
a memory, the memory to include:
a first queue, the first queue to receive packets of data, each packet of data having one of a plurality of different priority levels, the plurality of different priority levels including a first priority[[;]], the first priority being higher than the second priority, and
a second queue, the second queue to contain a first plurality of packets copied from the first queue, the first queue and the second queue each containing a plurality of sub-queues, each of the plurality of sub-queues representing one of the plurality of priority levels; and
~~a scheduling module scheduler,~~ the scheduling module scheduler to schedule packets from the second queue;
the scheduler to copy packets from the first queue to the second queue and to schedule a first set of packets from the second queue, wherein the first set of packets includes one or more of packets of the first priority if the second queue contains packets of the first priority and one or more packets of the second priority if the second queue contains packets of the second priority, and wherein the number of packets in the set of packets for each priority are chosen using weighted round robin scheduling based on the priority of each packet;

the scheduler to provide the first set of packets to the device driver and to
determine whether the second queue contains packets of the first priority
after providing the first set of packets to the device driver, and, if the
second queue includes one or more packets with the first priority after the
first set of packets have been provided to the device driver, the scheduler
to schedule a second set of packets from the second queue using the
weighted round robin scheduling, and, if there are no packets of the first
priority after the first set of packets have been provided to the device
driver, the scheduler to copy additional a second plurality of packets from
the first queue to the second queue.

10-12. (Cancelled)

13. (Currently amended) The scheduler of claim 9, wherein the scheduler is further to determine whether the second queue contains one or more packets of the first priority after copying the second plurality of packets into the second queue.
14. (Currently amended) The scheduler of ~~claim 13~~ claim 9, further comprising a timer for a delay period, the scheduler to start the timer if the scheduler determines that the second queue does not contain one or more packets of the first priority after copying the second plurality of packets into the second queue.
15. (Currently amended) The scheduler of claim 14, wherein the scheduler is to continue scheduling packets [[if]] while the timer is active.

16. (Currently amended) A system comprising:
- a memory; [[and]]
 - a device driver to receive packets of data; and
 - a scheduler, the scheduler to receive data from the memory, the scheduler comprising:
 - a first queue, the first queue to receive packets of data, each packet of data having one of a plurality of different priority levels, the plurality of different priority levels including a first priority and a second priority, the first priority being higher than the second priority;
 - a second queue, the second queue to ~~contain~~ receive a first plurality of packets copied from the first queue, the first queue and the second queue each containing a plurality of sub-queues, each of the plurality of sub-queues representing one of the plurality of priority levels; and
 - a scheduling module, the scheduling module to schedule a first set of packets from the second queue and to provide the scheduled first set of packets;
 - the scheduler to copy a second plurality of packets from the first queue to the second queue after the first set of packets is provided to the device driver;
 - the scheduler to determine whether the second queue contains packets of the first priority after the first set of packets have been provided to the device driver[[, and,]]; if the scheduler determines that there are one or more packets in the second queue after the first set of packets have been provided to the device driver, then

the scheduler is to schedule a second set of packets from the second queue using the weighted round robin scheduling; and
if the scheduler determines that there are no packets of the first priority in the second queue after the first set of packers have been provided to the device driver, then the scheduler is to copy additional a second plurality of packets from the first queue to the second queue.

17. (Original) The system of claim 16, further comprising a processor and a bus, the processor and memory being coupled with the bus.
- 18-20. (Cancelled)
21. (Currently amended) The system of claim 16, wherein the scheduler is further to determine whether the second queue contains one or more packets of the first priority after copying the second plurality of packets into the second queue.
22. (Currently amended) The system of claim 21, further comprising a timer, the scheduler to start the timer if the second queue does not contain one or more packets of the first priority after copying the second plurality of packets into the second queue, the timer to run for a delay period.
23. (Currently amended) The system of claim 22, wherein the scheduler is to continue scheduling packets ~~if the timer is active~~ from the second queue during the delay period.

24. (Currently amended) A ~~machine-readable~~ computer-readable medium having stored thereon data representing sequences of instructions that, when executed by a processor, cause the processor to perform operations comprising:
- receiving packets of data in a first queue, each of the packets having one of a plurality of priorities, the plurality of priorities including a first priority and a second priority, the first priority being higher than the second priority;;
- copying a first plurality of packets from the first queue to a second queue, the first queue and the second queue each containing a plurality of sub-queues, each of the plurality of sub-queues representing one of the plurality of priority levels;
- scheduling a first ~~subset~~ set of packets from the second queue, wherein the first set of packets includes one or more of packets of the first priority if the second queue contains packets of the first priority and one or more packets of the second priority if the second queue contains packets of the second priority, and wherein the number of packets in the set of packets for each priority are chosen using weighted round robin scheduling based on the priority of each packet;
- providing the first set of packets from the second queue to a device driver;
- determining whether after the first set of packets have been provided to the device driver the second queue includes a packet with the first priority;
- if the second queue includes a packet with a first priority after the first set of packets have been provided to the device driver, scheduling a second

~~subset~~ set of packets from the second queue using the weighted round robin scheduling; and

if the second queue does not include a packet with the first priority after the first set of packets have been provided to the device driver, pausing scheduling of packets from the second queue and copying a second plurality of packets from the first queue to the second queue.

25-27. (Cancelled)

28. (Currently amended) The medium of claim 24, further comprising instructions for determining whether the second queue contains one or more packets of the first priority after copying the second plurality of packets from the first queue into the second queue.

29. (Currently amended) The medium of claim 28, further comprising instructions for commencing a delay period if there is a determination that the second queue does not contain one or more packets of the first priority after copying the second plurality of packets into the second queue.

30. (Currently amended) The medium of claim 29, ~~further comprising instructions for continuing~~ wherein during the delay period the scheduling of packets from the second queue is to continue after ~~[[a]]~~ the determination that there are no packets of the first priority in the second queue ~~if the delay period is active~~.